Subject: Pi 2 Towers.....help
Posted by ImTweaked on Tue, 25 Jan 2005 15:59:56 GMT
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I buildt the pi Towers about 2 years ago for my son. we both love it and it met his budget and is driven by Welbourne DRD 300 BAs in all things audio... we would like to extract more and maybe upgrade the tweeter.. For the price a fantastic value!Sound opinion:The overall sound is very very good- especially the mid voice down to the bass. So much so that it "almost" can get away without the sub.The weakness we felt is in the intergration of the tweater to the 10 inch woofer region.Upper voice seem thin...and the tweeter seemed veiled and tight(subjective)Not enough transparencyFor what we invested this is a great product don't get us wrong . we just want to improve the tweeter and get a more open and robust upper voivce region. Pi 4 have been considered but he doesnot want a larger foot printHas any one upgraded to a better tweeter that handles the crossover with the 10 inch better? Any suggestions is appreciated.Like how about using a better tweeter from the upscale pi familyAny suggestions from Pi2 users and Wayne

Subject: Re: Pi 2 Towers.....help
Posted by RMW on Tue, 25 Jan 2005 17:00:38 GMT
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Hello ImT,In advance of Wayne's reply, which is sure to be prompt and well thought out, be aware that the two pi is now shipping with a Vifa HF driver and associated 6 dB/oct. HP filter cap. Seems to me this would be a natural upgrade path for you.

Subject: Re: Pi 2 Towers.....help
Posted by GarMan on Tue, 25 Jan 2005 19:18:45 GMT
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I went through a lot of mods on my Towers, each provided me with better sound, but at the same time, introduced higher costs to the speakers.The first was replacing the piezo tweeter with an Eminence APT80. The cost of the APT80 was reasonable, but the components required for a pair of high-pass filter pushed the cost up. Looking back, it wasn't a worthwhile mod. The KSN1038 tweeter is actually a very good driver and there are various ways to tweak it to your taste. In fact, I'm using a pair of it as UHF in my JBLPro system.The second mod was replacing the tweeter with a PSD2002 compression and crossing over at 1.6KHz. I called it my "Thermionic 2 PI" and it bumped the Towers up into the next class. Big improvement, but the cost for a pair of compression drivers, horns, and crossovers was a big investment. Unfortunately, my front baffle was cut exactly to plan and I did not have enough room to fit in the horns. The horns sat on top of the cabinet for several months. If your baffle can fit a pair of horns, this would be the mod I recommend.The last mod was attaching Wayne's midrange horns on the Alpha10 to emulate the

8PI. That was a lot of fun too.Gar.

Subject: Re: Pi 2 Towers.....help
Posted by Wayne Parham on Tue, 25 Jan 2005 20:24:12 GMT
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few days that describes them, and I'll show you how to retrofit if you want to do that. It's a very easy mod that you can do in about a half hour.New Vifa Tweeter

Subject: Re: Pi 2 Towers.....help
Posted by Skip Pack on Wed, 26 Jan 2005 17:15:57 GMT
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I've built all three speakers in the Studio line (1, 2, and 2 tower),all with the piezo tweeter, and I share Wayne's occasionally statedcomment that what you hear may be the upper end of the big driver'srange rather than the tweeter. I have made a change on two sets of speakers that has been pleasing to me. I have switched the seriescoil, using North Creek Musin 14 guage coils. These, obviously havemuch lower DC resistance, and seem to make the speaker richer withoutdecreasing the sense of detail. I have tried .5mh and .7mh values andprefer the .7mh. Wayne has stated that anywhere up to 1mh falls within in his 'reasonable' range of values. Perhaps 1mh would be even nicer.I notice that Parts Express is now offering large guage air-corecoils, and the prices are comparable to North Creek.I have also paralleled a 50 ohm resistor across the tweeter, but I'mless sure of a significant difference here. I use these speakers withgainclone amps, and I thought the resistors might make the load morebenign, as gainclones are reputed to dislike capacitative loads. Please take my comments here as coming from one without significanttechnical authoritySkip

Subject: Re: Pi 2 Towers.....help
Posted by Adam on Wed, 26 Jan 2005 18:52:40 GMT
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Agreed... A 2002 would provide much better integration to a larger midrange driver than other, smaller format tweeters.Adam

Subject: Thanks all; Now I got my work cut out...Wayne P

Posted by ImTweaked on Thu, 27 Jan 2005 17:10:20 GMT
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where can I get more info on this new vifa and also how to step by step modify the xover...also th 1 mhenfy air coil is that a part you haveThanks ImTweakedindesignho@aol.com

Subject: Garman....
Posted by ImTweaked on Thu, 27 Jan 2005 20:09:50 GMT
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What would that PSD2002 and horn and xover parts cost? Probably I can find that at Waynes site but what would the xover parts cost and is it complex?Do you have pictures? Our speaker is not finished i.e.veneered- I may be able to modify. Although I did use the narrower side as the frontThanks

Subject: Re: Prices....
Posted by GarMan on Thu, 27 Jan 2005 21:49:38 GMT
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Wayne actually has very competitive pricing, so I would direct you to him for an estimate. Items you will need are: H290 horn, PSD2002, crossover. I think this set up will get you 85% to 90% there to what the Theatre PI's have to offer, without starting from scratch on another cabinet.In terms of crossover, Wayne should be able to help you with that too. It's a variation of the crossover used in this 3PIs and 4PIs. He'll put together network that includes a 2nd order low-pass, 3rd order high-pass at 1600Hz, attenuation to match the tweeter with the woofer, and compensation for the tweeter in its upper range. You can download a detailed description of this network from his website a www.pispeakers.com.As for fit, look up the dimensions of the H290 horn on Eminence's website: www.eminence.com to determine if you have room. Like I said, I followed the orignal plan exactly and was short 1/4" between the Alpha10 and top panel. Frustrating cause it was only 1/4".Not much to show photo-wise. Imagine a horn sitting on top of the Tower. However, if you can fit the horn on your front baffle, it might look something like my Theater 3's.Gar.
Theatre Three PI Photos

Subject: You've got mail!
Posted by Wayne Parham on Thu, 27 Jan 2005 23:20:06 GMT
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I'll make an announcement about the new design next week.
